Overview

Special Features

- **Movies and Photos —** Capture, edit, and share your digital photos or videos with Sony's exclusive digital editing software package
- **Music and Entertainment —** Make custom audio CDs with SonicStage™ software*
- **Watch DVDs —** Take your entertainment and go anywhere, anytime, with the built-in CD-RW/DVD-ROM combo drive or DVD-RW drive

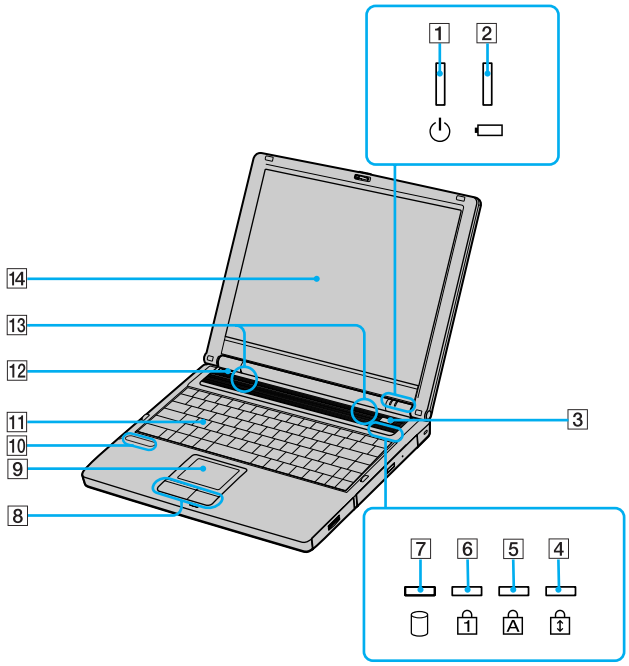
Software

- **Microsoft® Windows® operating system —** Includes Microsoft® Windows® XP Home Edition operating system
- **Audio and Video Authoring, Viewing, and Sharing —** Powerful applications for creating and sharing your own movies and managing your audio files

Hardware

- **Exceptional Performance —** Fast Intel® Pentium® 4 processor 2.66 GHz†
- **Power —** High-capacity lithium-ion battery
- **Portability —** Approximately 7.72 pounds light (with battery) and approximately 2" thin
- **Usability —** Large display, generous hard drive, expandable memory:
  - 15" XGA TFT display (LCD)
  - 40 GB‡ hard disk drive
  - 512 MB DDR SDRAM (maximum 1 GB**)
- **Connectivity —**
  - i.LINK®†† S400 port (4-pin)
  - A/V Out jack
  - USB 2.0 ports‡‡ (3)
  - Monitor port (VGA)
  - 10BASE-T/100BASE-TX Ethernet port (RJ-45)
  - Modem jack (RJ-11)
  - Memory Stick® media slot
  - Headphones jack
  - Microphone jack
  - PC Card slots

Front



Front

1 Power indicator
2 Battery indicator
3 Power button
4 Scroll lock indicator
5 Caps lock indicator
6 Num lock indicator
7 Hard disk drive indicator
8 Left and right buttons
9 Touch pad
10 Memory Stick® media indicator
11 Keyboard
12 Model name
13 Speakers
14 Display (LCD)

* Software available only on models with the Microsoft® Windows® XP operating system.

† GHz denotes maximum microprocessor internal clock speed; other factors may affect application performance.

‡ GB means 1 billion bytes when referring to hard disk drive capacity. Five GB of hard disk space is reserved as a recovery partition. Accessible capacity may vary.

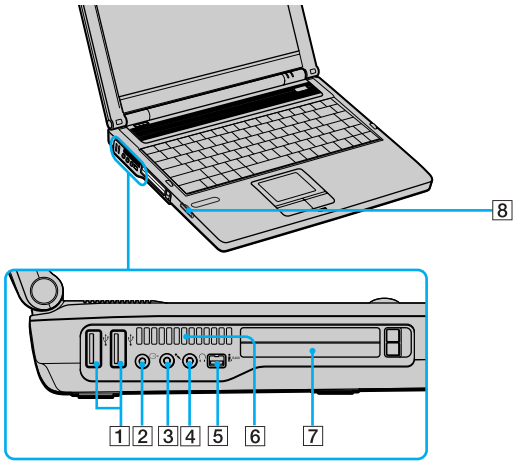
** One GB is equal to 1,024 MB.

†† i.LINK is a trademark of Sony used to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software applications, operating system, and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Please refer to the documentation that came with your compatible i.LINK device for information on operating conditons and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

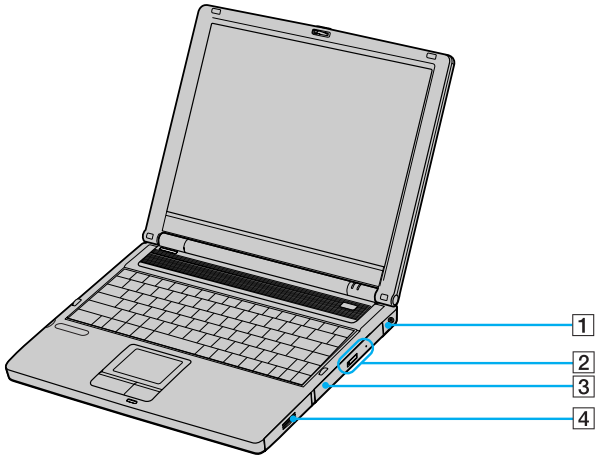
‡‡ High, full, and low speeds supported

Left

1 USB 2.0 ports (2)
2 A/V Out jack
3 Microphone jack
4 Headphones jack
5 i.LINK® S400 port (4-pin)
6 Air vent
7 PC Card slots
8 Memory Stick® media slot

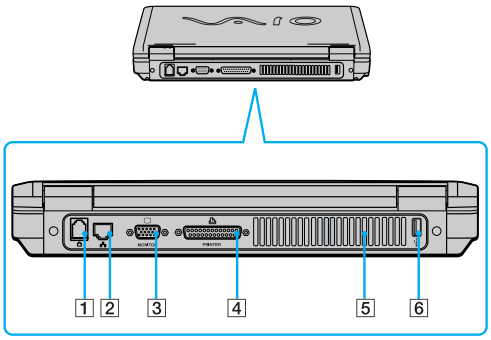


Right



1 DC IN port
2 EJECT button
3 Optical drive
4 Battery bay

Back



1 Modem jack (RJ-11)
2 10BASE-T/100BASE-TX Ethernet port (RJ-45)
3 Monitor port (VGA)
4 Printer port
5 Air vent
6 USB 2.0 port

Standard Features

Feature	Description PCG-FRV Series
Processor	Intel® Pentium® 4 processor 2.66 GHz[1]
L2 Cache Memory	512 KB (CPU Integrated)
Operating System	Microsoft® Windows® XP Home Edition
Hard Disk Drive	40 GB[†] (35 GB available hard drive space)
Standard RAM	512 MB (Expandable to 1 GB[‡]) (PC2100 DDR SDRAM)
LCD Screen	15" XGA (1024 x 768) TFT screen
Graphics	64 MB ATI RADEON™ IGP 345M Chipset Integrated Graphics
Optical drive	Available: DVD-RW or CD-RW/DVD-ROM
Sound Capabilities	Windows® sound system compatible Integrated stereo speakers
Modem	V.90 data/fax modem[11]
Expansion Capabilities	Two PC Card slots that support two Type I or II PC Cards or one Type III PC Card, with CardBus support
Built-in Capabilities	Stereo speakers Touchpad Memory Stick® media slot
Connection Capabilities	Modem port (RJ-11) i.LINK®[††] (S400) port (4-pin) 10BASE-T/100BASE-TX Ethernet port (RJ-45) USB 2.0 ports[‡‡] (3) Microphone jack Headphones jack Monitor port (VGA)
Supplied Accessories	Rechargeable Lithium-ion battery AC adapter and power cord
Power Source	19.5V DC/AC 100-240V
Power Management	Energy Star® compliant Advanced Configuration and Power Interface (ACPI)
Dimensions (approximate)	13" (w) x 1.65/2.26" (h) x 10.8" (d) (329 mm x 42/57.4 mm x 274.5 mm)
Weight (approximate)	7.72 lbs. (3.5 kg) with standard battery
Operating Temperature	40° F to 95° F (5° C to 35° C)
Operating Humidity	20% to 80% (not condensed), provided that humidity is less than 65% at 95° F (35° C), hygrometer reading of less than 84° F (29° C)
Storage Temperature	-4° F to 140° F (-20° C to 60° C) temperature gradient less than 18° F (-10° C) per hour

Standard Features (Continued)

Feature	Description PCG-FRV Series
Storage Humidity	10% to 90% (not condensed), provided that humidity is less than 20% at 140° F (60° C), hygrometer reading of less than 95° F (35° C)

1 Processor speed will be reduced under certain operating conditions. GHz denotes microprocessor internal clock speed; other factors may affect application performance.

† GB means 1 billion bytes when referring to hard disk drive capacity. Accessible capacity may vary. Five GB of hard disk space is reserved as a recovery partition.

‡ One GB is equal to 1,024 MB.

11 Maximum speed for faxing is 14.4 Kbps. Your modem is capable of downloading at 56 Kbps using V.90. Your online service or Internet Service Provider may not support this technology or operate at this speed.

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‡‡ High, full, and low speeds supported.

Available Configurations

Model Name	Processor Speed	Screen	Memory	Hard Disk Drive	Optical Drive	Operating System
PCG-FRV27	Intel® Pentium® 4 Processor 2.66 GHz[1]	15” XGA	512 MB (max. 1 GB)	40 GB†	DVD-RW	Microsoft® Windows® XP Home Edition
PCG-FRV25	Intel® Pentium® 4 Processor 2.66 GHz	15” XGA	512 MB (max. 1 GB)	40 GB	CD-RW/DVD combo drive	Microsoft® Windows® XP Home Edition

1 Processor speed will be reduced under certain operating conditions. GHz denotes microprocessor internal clock speed; other factors may affect application performance.

† GB means 1 billion bytes when referring to hard disk drive capacity. Accessible capacity may vary. Five GB of hard disk space is reserved as a recovery partition.

Options

Option	Description	Model
Memory	256 MB memory upgrade (open slot) 512 MB memory upgrade (open slot) Use PC2100 DDR SDRAM only	
Monitors	A Sony VAIO® monitor or Sony LCD projector may be connected as an external display. Display cable(s) required	
Drives	External USB floppy disk drive	PCGA-UFD5
i.LINK®(IEEE 1394) Cables[1]	Only compatible i.LINK devices may be connected, using the following i.LINK cables: 1.5-meter, 4-pin connector 1.5-meter, 4-pin connector to 6-pin connector 3.5-meter, 4-pin connector	 VMC-IL4415A VMC-IL4615A VMC-IL4435A
Accessories	Sony USB mobile mouse Sony USB optical mouse	PCGA-UMS3/V PCGA-UMS5
Memory Stick® Media†	32 MB 64 MB 128 MB	MSA-32A MSA-64A MSA-128A
Multimedia	External speakers Sony Digital Handycam® camcorder Sony digital still camera Sony Mavica® camera Sony projector External microphone or other audio device	PCGA-SP1
Wireless Connectivity	802.1lb Wireless LAN Pro Access Point 802.11g Wireless LAN Router Access Point 802.11b Wireless LAN PC Card 802.11g Wirelees LAN PC Card	PCWA-A200 PCWA-AR300 PCWA-C150S PCWA-C300S
Network Connectivity	Network compatible with third-party PC card network interface	
Other Connectivity	Personal Digital Assistant (PDA) or Sony CLIÉ™ handheld device	
Power	AC adapter Standard lithium-ion battery	PCGA-AC19V7 PCGA-BP2NX
Carrying Cases	VAIO® Carrying Case Ample room to hold notebook computer, AC adapter, extra battery, and floppy or optical drive with additional compartments and pockets. Compatible with any VAIO notebook. VAIO® Notebook Backpack Ergonomically designed backpack with padded shoulder straps and ribbed contour padding on the back for maximum comfort. VAIO® Notebook & AC Adapter Cases (neoprene) Protect your PC from spills, nicks, and scratches.	PCGA-CCGX PCGA-CCP1 PCGA-CCN1S

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† Data storage capacity may vary as a portion of the memory is used for data management functions.

Memory and Storage

Item	Description
L2 Cache Memory	512 KB (CPU Integrated)
Hard Disk Drive	40 GB[1] (35 GB available hard drive space)
Standard RAM	512 MB (Expandable to 1 GB[†]) (PC2100 DDR SDRAM)

1 GB means 1 billion bytes when referring to hard disk drive capacity. Accessible capacity may vary. Five GB of hard disk space is reserved as a recovery partition.
† One GB is equal to 1,024 MB.

Typical Expansion Memory Configuration

The amount of memory installed on your computer may vary, depending on the model you purchased.

Total System Memory (MB)	Slot 1 (MB)	Slot 2 (MB)
512	256	256
768	256	512
1,024	512	512

Software

Preinstalled software may not be identical to retail versions or have all documentation.

Application	Description
Adobe® Acrobat® Reader® *Adobe Systems Inc.*	Acrobat Reader software enables you to view, navigate, and print electronic documents in Adobe's Portable Document Format (PDF), an open file format intended to preserve the fidelity of documents created on many major computer platforms.
America Online®[1] (Broadband or Dial-Up) *America Online, Inc.*	America Online is a popular Internet online service. Stay in touch with family and friends with easy-to-use e-mail. Manage your personal finances, get the latest news and sports scores, and chat with thousands of others who share your interests.
AT&T WorldNet® Service *AT&T Corp.*	AT&T WorldNet Service offers fast, reliable Internet access. Customer benefits include Web-based e-mail, video e-mail, multiple e-mail accounts, free Web pages, online and live agent technical support, instant messaging, and parental controls.
Boingo Wireless™ *Boingo Wireless, Inc.*	Boingo Wireless offers Wi-Fi access in hundreds of hot spot locations, including airports, hotels, coffee shops and other public spaces. Experience the Internet up to 100 times faster than dial-up, and enjoy being totally mobile.
Click to DVD™ *Sony Electronics Inc.*	At the touch of a button, Click to DVD software allows you to automatically burn DVDs from a digital video device. Create DVDs by capturing video content straight from a digital video (DV) device or by importing video from stored files — and you can also edit the video if desired. Create DVD photo albums and slide shows, with picture files or by importing pictures from a digital still camera. What's more, you can easily give a professional look to your DVDs by adding chapter menus, backgrounds, and menu screens. You're only a few clicks away from your own DVDs!
Drag'n Drop CD+DVD *DigiOn, Inc., and Easy Systems Japan Ltd.*	Drag'n Drop CD+DVD software is designed to make CD and DVD creation simple. You can create you own audio or data CDs and data DVDs. These discs can be read in most audio CD players or personal computers. With Drag'n Drop CD+DVD software, you can also back up CDs.
DVgate™ Plus *Sony Electronics Inc.*	Connect a compatible digital video camera to your computer's i.LINK® port and capture video clips and still images. Edit clips from your video, add new clips, and combine clips into new movie segments. Save your movies back to your digital video came or in a variety of popular file formats.
EarthLink℠ Total Access® 2003 (DSL or Dial-Up) *EarthLink, Inc.*	EarthLink, one of the world's largest Internet Service Providers, offers dial-up and broadband access to the Internet. Member benefits include e-mail, newsgroups, a Personal Start Page, free storage space for your personal Web site, a member magazine, and 24-hour technical support.
McAfee Internet SecurityCenter* (trial version) *Network Associates Technology, Inc.*	The McAfee.com SecurityCenter combines a set of must-have tools with simplified world class managed security services. The McAfee.com SecurityCenter is an easy-to use environment where McAfee subscribers can launch, manage and configure their security subscriptions. The SecurityCenter also acts as a source of information for virus alerts, product information, support, subscription information and one-click access to tools and news hosted at www.mcafee.com. Includes VirusScanOnline, Personal Firewall Plus, Privacy Service and SpamKiller. This is a trial version of the McAfee SecurityCenter.
Microsoft® Age of Empires II: The Age of Kings *Microsoft Corp.*	The Age of Kings is the sequel to the award-winning, best-selling realtime strategy game Age of Empires. Age of Empires II spans a thousand years, from the fall of Rome through the Middle Ages in which players lead one of 13 civilizations into greatness. The game keeps the epic scope of Age of Empires' game play while evolving the combat and economic features. Rated TEEN by the ESRB: Content may be suitable for persons ages 13 and older. May contain violent content, mild or strong language, and/or suggestive themes.

Software (Continued)

Preinstalled software may not be identical to retail versions or have all documentation.

Application	Description
Microsoft® Encarta® Online† Microsoft Corp.	Encarta Online, the online version of the popular encyclopedia, includes more than 47,000 encyclopedia articles, many with multimedia features such as video and audio clips. You'll also find links to trusted Web sites with even more information. An interactive world atlas lets you zoom in on a particular region or country.
Microsft® Money 2003 Standard‡ Microsoft Corp.	Microsoft Money 2003 Standard provides a quick and easy way to organize and manage your personal finances. New features include auto-balancing, a bills estimator, spending comparison reports, and investment reminders. Save time organizing and managing your cash flow and balancing your checkbook. Create and track a budget, pay your bills, organize your finances, and view a complete picture of your financial health all in one place.
Microsoft® Movie Maker 2 Microsoft Corp.	Windows® Movie Maker 2 makes home movies amazingly fun. With Movie Maker 2 you can create, edit and share your home movies right on your PC. Build your movie with a few simple drag-and-drops. Delete bad shots and include only the best scenes. Add special effects, music and narration. Then share your movie via the Web, e-mail, on your PC, CD, or even DVD. You can also save your edited movie back to the DV tape in your camera to play on a TV or even on the camera itself.
MIcrosoft® MSN 8* Microsoft Corp.	MSN 8.0 combines fast, reliable service with innovative Microsoft software to make the Web more useful for you and your family. The new MSN 8 includes smart features such as automatic e-mail virus protection services, an intelligent junk mail filter, powerful parental controls, and easy switching tools.
Microsoft® Windows Media® Player Microsoft Corp.	Get fast and flexible playback with the best audio and video quality for Windows and the Web. Includes special new features optimized for Windows XP. You can use Microsoft Windows Media® Player to play and organize digital media files on your computer and on the Internet. In addition, you can use the Player to listen to radio stations from all over the world, play and copy CDs, create your own CDs, play DVDs, and copy music and videos to portable devices, such as portable digital audio players and handhelds.
Microsoft® Works Microsoft Corp.	Works lets you quickly and easily create high-quality, fun documents. Works provides the core tools you need to create documents, manage lists and schedules, create reports and budgets and organize information from many sources. Works includes Word Processor, Works Database, Works Spreadsheet, Works Portfolio, and Works Calendar.
MoodLogic MoodLogic, Inc.	MoodLogic is the world's largest descriptive database of song information. The information is provided from music lovers like you. MoodLogic allows you to browse the songs by artist and genre, narrow your selections by tempo or year, save your favorite playlist and transfer it to a portable player.
Network Smart Capture Sony Electronics Inc.	Network Smart Capture captures images and video from any Sony Digital Camcorder that supports a standard i.LINK connection. Send your video or still images through e-mail or upload them to the ImageStation(SM) service. You can use the Web camera function to automatically upload your captured images.
PictureGear Studio™ Sony Electronics Inc.	PictureGear Studio still image management software displays still images from your hard drive or a Sony digital still camera. The still images appear in a convenient light-table format so that you can easily view the contents of an entire folder, create your own photo albums and make prints.
Quicken® 2003 New User Edition Intuit Inc.	Quicken software is a fast, easy way to organize your finances. Quicken software works just like your checkbook, so it's easy to learn and use. You can even pay your bills online. Quicken software manages all of your finances, bank accounts, credit cards, investments, and loans. (Users of earlier versions of Quicken software must upgrade for a fee.) Upgrade possible to Quicken® Deluxe, and other versions.

Software (Continued)

Preinstalled software may not be identical to retail versions or have all documentation.

Application	Description
QuickTime® *Apple Computer, Inc.*	The versatile QuickTime software plays many, many different kinds of media files, including video, audio, and virtual reality (VR) movies. You can play QuickTime files (referred to as "QuickTime movies") using QuickTime Player or any other application, such as a Web browser or word processor, that supports QuickTime software.
RealOne™ Player *RealNetworks, Inc.*	RealOne™ Player is an all-in-one digital media player that lets you find everything and play anything. RealOne Player fuses a streaming media player, jukebox, browser and new content discovery services all in one application. Play CDs, MP3s and internet radio stations from anywhere in the world. View video clips and movies with the same player. Download music directly to your Sony MiniDisc™ Walkman or your Sony Memory Stick™ Walkman.
SonicStage™ *Sony Electronics Inc.*	The SonicStage jukebox application gives you all the tools you need to manage music on your computer. SonicStage software sports high-quality digital audio storage, a music visualizer, a sleek player skin design, audio CD burning capability (on computer models that include a CD recording device), and a parametric equalizer for fine-tuning audio playback.
Sony on Yahoo! *Yahoo! Inc.*	Personalize your own Web portal with Sony on Yahoo! Get a free Web mail account, customized news and local weather reports, comics, instant messaging, and more.
Sony® VAIO® Product Registration *Sony Electronics Inc.*	VAIO Product Registration is an integrated registration application for both Sony Electronics and Microsoft. By registering with Sony, you enable Sony to notify you of software and hardware issues that may affect your user experience. Microsoft directs the data to Sony Electronics. Sony uses the registration data for warranty and product support purposes and the analysis of customer feedback on Sony computer features.
TurboTax® for the Web *Intuit, Inc.*	Quickly and easily prepares and files tax returns without downloading or installing any software. From the easy-to-use interview to features such as Instant Data Entry, also found in the TurboTax desktop products, TurboTax for the Web offers easy, fast and customized tax preparation.
VAIO® Hints and Tips *Sony Electronics Inc.*	VAIO Hints and Tips provides helpful information about using your computer's preinstalled hardware and software. You can find suggestions on improving system performance, answers to frequently asked questions, and creative ways to tap into your computer's multimedia capabilities. As you become familiar with your computer's features, your creative VAIO® computer experience expands.
VAIO Media™ *Sony Electronics Inc.*	VAIO Media™ software brings multimedia to your network, enabling you to share music, video, and still image files between your VAIO computers. You can set up one or more computers as "media servers," which store your multimedia files and make them available to other VAIO computers on your wired or wireless network.
VAIO Support Agent *Sony Electronics Inc.*	VAIO Support Agent provides immediate, interactive online support with information about your preinstalled software and answers to frequently asked questions.
WinDVD 4 for VAIO® *InterVideo, Inc.*	WinDVD is a simple-to-use DVD player that offers all the features you would expect to find in a standard consumer DVD player, including advanced display and navigation features such as zoom, pan, bookmark, and time search.

1 Requires a fee for use.
† Limited duration trial subscription to Microsoft's current online version. Internet access required; additional fees, including telephone or long-distance charges, may apply.
‡ Certain features are time limited.

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